

22 MAY 1959

MEMORANDUM FOR: Deputy Director (Plans)
Deputy Director (Intelligence)
Deputy Director (Support)

SUBJECT: Establishment of a Data Processing Committee

REFERENCE: Memorandum for DCI, dated 12 February 1959,
from Management Staff, subject: Data Processing
Machines

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1. The referenced Staff Study proposed for the establishment of a Data Processing Committee is approved.
2. The Committee will be composed of a senior representative of the DD/P, DD/I and DD/S. is appointed Chairman.

SIGNED

ALLEN W. BURNS
Director

O/DCI/ (20 May 59)

Distribution:

- 1 - Each Addressee
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(EXECUTIVE READING FILE DDP)

Release 2002/07/29 : CIA-RDP80B01676R003400210004-
CENTRAL INTELLIGENCE AGENCY

OFFICE OF THE DEPUTY DIRECTOR

20 May 1959

DCI:

I feel we must move ahead in the establishing of a central group to keep a constructive and progressive eye on the use by the Agency of electronic data processing equipment.

Recommend you sign the attached which approves the establishment of a central Committee, to be chaired by [redacted] with representatives of DD/P, DD/I and DD/S.

SIGNED

DDCI

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12 FEB 1959

~~SECRET~~**MEMORANDUM FOR: Director of Central Intelligence****SUBJECT : Data Processing Machines****EXPLANATION AND DEFINITIONS:**

a. **EXPLANATION:** All of this equipment accepts the record of data, retains it, variously processes it and produces collaborative results. In addition, Electronic Data Processing Machines have the facility of accepting and retaining programmed instructions in order to directionalize the end product. Separately, Photo-Electronic Document Retrieval mechanisms reproduce actual images of original insertions, including those of related matter, if desired.

b. **DEFINITIONS:**

(1) **ELECTRIC ACCOUNTING MACHINES (EAM).**

This is the method of recording a substantial, but limited, quantity of data on a card via mechanical code punching - which cards then are subjected to mechanical and electrical manipulation to speedily produce an analytical printed end product.

(2) **ELECTRONIC DATA PROCESSING MACHINES (EDPM).**

This is the method of recording relatively unlimited quantities of data on a magnetic surface (disc or tape) for subsequent high-speed automatic manipulation - responsive to highly variable programmed machine instruction.

(3) **PHOTO-ELECTRONIC DOCUMENT RETRIEVAL MACHINES (P-EDRM).**

This is the method of indexing, recording and manipulating micro-photographic images of original documents.

1. **PROBLEM:**

What steps should be taken now to anticipate Agency-wide application of recent and potential developments in the electronic data processing field - inclusive of the centralization potential for all machines offered by the Agency's new building.

2. **ASSUMPTION:**

It is assumed that because of high costs for these installations, intra-Agency compartmentalization must yield to a controlled centralization when shown desirable.

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3. FACTS:

(Organization of the following material is in three categories: Installations Completed, Installations in Process and Installations under Consideration)

Installations Completed

- a. EAM SUMMARY (See Tab A for details). Present installations are 16 in number.

One-time and continuing costs, personnel and space required are as follows:

DESCRIPTION	ONE-TIME COSTS	ANNUAL CONTINUING COSTS	NUMBER OF PERSONNEL	SPACE
(1) <u>Investment</u>				
(a) Basic Machine	-			
(b) Related Machines	\$247,073.			
(c) Related Files	215,477.			
(d) Cost of Installing	1,000.			
(2) <u>Continuing Annual Costs</u>				
(a) Salary of Employees		\$1,260,635.		
(b) Rental of Machines		653,112.		
(c) Cost of Supplies		278,720.		
(d) Maintenance of Machines		480.		
(3) <u>Number of Employees</u>			268	
(4) <u>Square Feet of Space</u>				32,088
TOTALS	\$463,550.	\$2,192,947.	268	32,088

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- b. EDPM SUMMARY (See Tab B for details). There is only one EDPM Installation - an ALMAC III Computer at the Photographic Intelligence Center, Stuart Building.

One-time and continuing costs, personnel and space required are as follows:

DESCRIPTION	ONE-TIME COSTS	ANNUAL CONTINUING COSTS	NUMBER OF PERSONNEL	SPACE
(1) <u>Investment</u>				
(a) Basic Machine	\$85,000.			
(b) Related Machines	5,000.			
(c) Related Files	-			
(d) Cost of Installing	5,000.			
(2) <u>Continuing Annual Costs</u>				
(a) Salary of Employees		\$12,300.		
(b) Rental of Machines		-		
(c) Cost of Supplies		210.		
(d) Maintenance of Machine		9,000.		
(3) <u>Number of Employees</u>			2	
(4) <u>Square Feet of Space</u>				280
TOTALS	\$95,000.	\$21,510.	2	280

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Installations
In Process

a. There are no installations of EAM or EDPM in process.

b. P-EDRM SUMMARY (See Tab C for details). There are two MINICARD systems in process - #1 Photographic Intelligence Center, Stewart Building and #2 OCR, M Building.

One-time and continuing costs, personnel and space required are as follows:

DESCRIPTION	ONE-TIME COSTS	ANNUAL CONTINUING COSTS	NUMBER OF PERSONNEL	SPACE
(1) <u>Investment</u>				
(a) Basic Machine #1(PIC)	\$ 936,370.	*		
Basic Machine #2(OCR)	367,000.			
(b) Related Machines(OCR)	25,000.			
(c) Related Files	-			
(d) Cost of Installing (both)	84,857.			
(2) <u>Continuing Annual Costs</u>				
(a) Salary of Employees(OCR)		*** \$ 44,000.		
(b) Rental of Machines		-		
(c) Cost of Supplies****		-		
(d) Maintenance of Machine (both)		180,000.		
(3) <u>Number of Employees</u> (OCR)			8***	
(4) <u>Square Feet of Space</u> (both)				2450
TOTALS	\$1,413,227.	\$224,000.		2450

* Subject to renegotiation upon completion of contract.

** [] has submitted a claim for \$800,000 over-ride subject to negotiation.

*** Personnel costs of Pilot Operation now in process.

**** To be determined from Pilot Operation

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Installations
Under
Consideration

a. There are no new EAM installations under consideration.

b. EDPM and P-EDRM SUMMARY. Three separate studies are now in process - two for application of EDPM methods and one for P-EDRM as follows:

DESCRIPTION OF STUDY	AMOUNT OBLIGATED AND BUDGETED	AMOUNT OF LETTERS OF INTENT
(1) -- Contract with Corp. to study Clandestine Services Record problem to determine feasibility of mechanization. Study supported by machine research. Review of findings and decision whether to implement to be made by in April 1959. (Cost of contract does not include purchase or rental of machines needed for implementation).	\$850,000.	25X1
(2) <u>FEASIBILITY STUDY-DD/S</u> -- To determine the feasibility of applying EDPM methods to meet the recording, reporting and accounting requirements of the Offices of Comptroller, Personnel and Logistics. Letter of Intent issued to Corp. for lease of Datatron 220 Computer at approximately \$240,000. a year. Decision to confirm or withdraw Letter of Intent to be determined on basis of findings.		25X1
The report on findings, due for completion in the next few weeks, will include an estimate of savings to be realized.		\$240,000.
(3) <u>FEASIBILITY STUDY-</u> -- To determine the feasibility of replacing present EAM methods used to operate the Locator, Files Charge-Out and 201 Files procedures, with EDPM methods. Letter of Intent for an IBM 650 RAM has been issued to Corp. Rental of 650 will be approximately \$158,940. a year. Decision to confirm or withdraw Letter of Intent will be based on findings.		\$158,940.
The report on findings, due for completion in the next few weeks, will include an estimate of any savings to be realized.		
TOTALS	\$850,000.	\$398,940

4. DISCUSSION - EAM and EDPs

- a. Historically our existing and potential data processing actions have been responsive to isolated and particular needs. Such an approach is challenged today on three scores - the new building, the dynamics in this machine field and by the heavy costs of 17 completed and 5 potential separate installations.
- b. The cost of each installation has been justified on the basis of economy in machine rental and personnel and/or the production of results not otherwise obtainable. All of these machines have a high degree of utilization - close to maximum. In some cases utilization is over maximum, thus requiring overtime. However, obviously the necessary dispersal of 17 installations throughout the Agency does in itself cost excessively in machine rental, space, numbers of personnel including supervisors, higher grades, and related equipment. Clearly the new building offers substantial correction on this score.
- c. Many of these installations have been in being for a substantial period of time and hence updated objective scrutiny of end-product in each case may very well lower the machine requirements. Separately also, the possibility of centralization of some or most of these installations should raise the question of replacement with EDPM equipment.
- d. This paper offers the basis for over-all Agency programming and improved control in the field of data processing. A program must deal with utilization of existing machines for new purposes, compatibility of existing and new machines, validity of end-products - old and new, assessment of costs against established validity and screening for appropriate authority.

Installations In Process

- a. These two installations in process (Tab C) are MINICARD systems. The costs, due to the required geographic separation in this case make the investment of serious concern. We are committed to nearly a million dollars for PIC in the Stewart Building and for over a quarter of a million dollars for tests of MINICARD in OCF's 7th Building. These two installations lend themselves to centralization with all of the advantages outlined previously in respect to EAM plus a great difference in investment. Because of the investment total and the test nature of the OCR installation further commitment in respect to MINICARD should wait on completion of the test. Further emphasis is given this last consideration if OCR MINICARD tests proves unsuccessful, in that the contemplated Walnut installation might very well do

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this job. Additionally another factor to be weighed in this connection is the maintenance cost of ninety thousand dollars annually for each MINICARD installation until at least two full-time Agency mechanics have been trained to do a full-time substitution.

Installations
Under
Consideration

25X1

- a. Today the [] appears to offer a real prospect for success. Adequate controls in respect to cost here are already set up within the PRC. These new costs must also be weighed in terms of the good possibility that Walnut could replace the [] IBM 650 RAM which is projected to cost nearly one hundred and fifty-nine thousand dollars in annual rental.

b. If the feasibility study within DD/S demonstrates the utilization of a computer, additional work for it together with the possibility of a computer center must be weighed for the new building.

5. CONCLUSION:

The Agency needs a composite data processing program.

6. RECOMMENDATIONS:

- a. Take the first step in constructing an Agency data processing program by the appointment of senior component representatives to a data processing committee with concurrence responsibility.
- b. Require prompt updating of all end products from existing installations to the end of re-establishing and probably lowering today's requirements.
- c. The Management Staff - Business Machines Service promptly undertake a study to serve the following two objectives: (1) ascertain how existing RAM installations can be centralized; (2) what machine changes, with particular reference to EDPN could replace existing RAM machinery under centralized conditions.
- d. Withhold any more commitments in respect to MINICARD until the test in OCR has been completed.
- e. Require prompt establishing of computer requirements by the operating officers in DD/I.

Distribution:

- O & 1 - DD/S
- 1 - MgtS File
- 1 - MgtS Chrono

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Signed

[]
Business Machines Service

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Signed

[]
Management Staff

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MgtS/[] (12 Feb 59)

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MEMORANDUM FOR: THE DIRECTOR

25X1 [] and I have long believed that there is a real future in the Agency for electronic data processing equipment and, as you know, we have been dabbling in this area for some years. We continue to believe that this is an area which deserves our special attention. However, I am concerned at this point because we have several different components which are exploring various different systems, all of which are quite expensive. I believe that it is urgent at this time that we look into this whole problem on an Agency-wide basis to assure that as we go forward we do so in a way

MEMORANDUM FOR:

which will serve the Agency's need in the most economical way. The attached staff study was prepared by [] and [] at my request. I concur in their recommendations.

L. K. White
Deputy Director
(Support)

12 February 1959
(DATE)

cc: DDCI ✓

FORM NO. 101 REPLACES FORM 10-101
1 AUG 54 WHICH MAY BE USED.

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